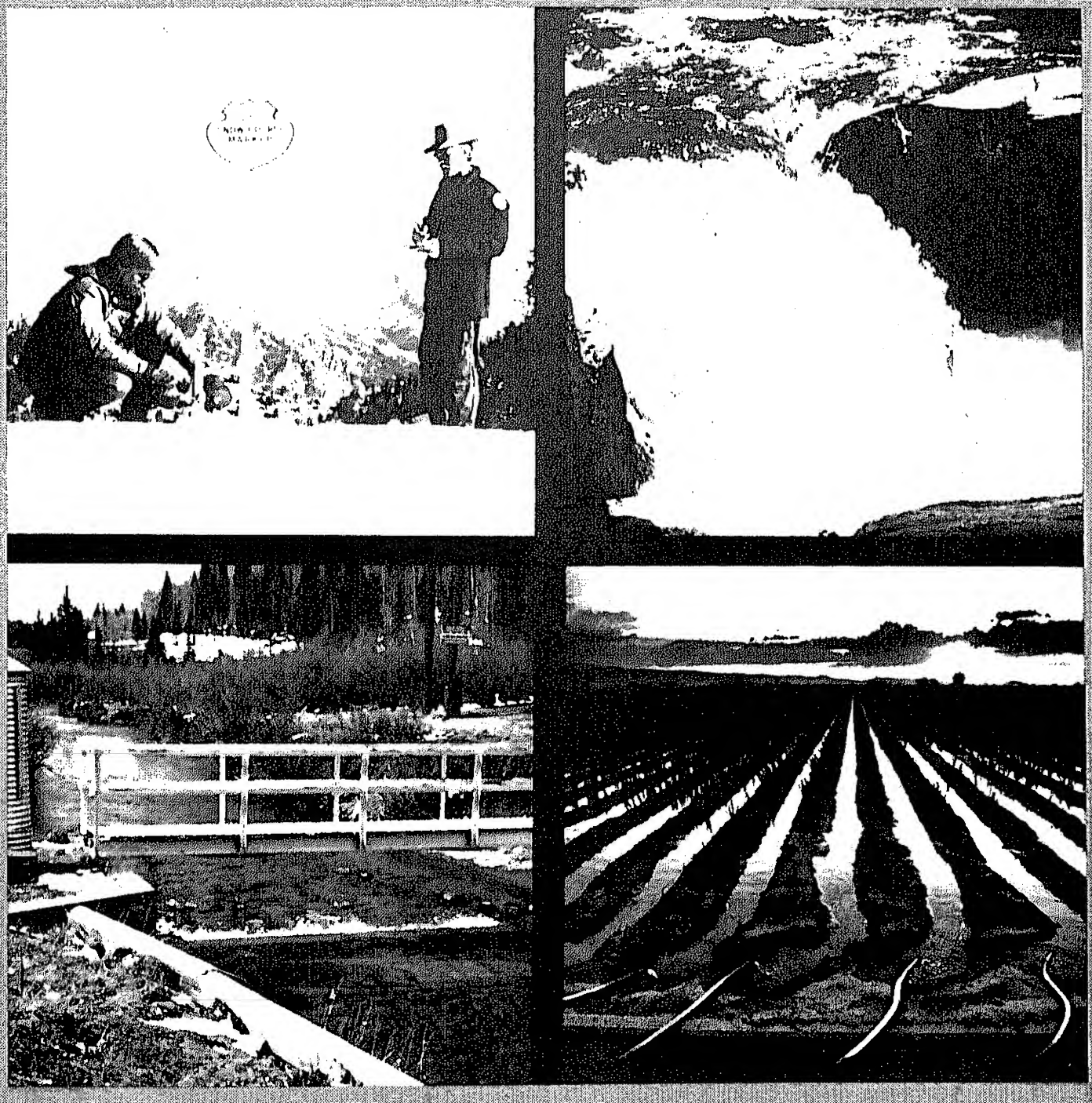
United States
Department of
Agriculture

**Soil
Conservation
Service**

Salt Lake City,
Utah

Utah
Water Supply Outlook

March 1, 1988



Foreword

How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall. This snowfall accumulates high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are viewed in conjunction with snowpack data to prepare runoff forecasts. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data and narratives describing current conditions.

Streamflow forecasts are cooperatively generated by Soil Conservation Service and National Weather Service hydrologists. Forecasts become more accurate as more data affecting runoff becomes known. For this reason, forecasts are issued that reflect three future precipitation conditions — Below Normal, Average, and Above Normal. These forecasts are terms reasonable minimum, most probable, and reasonable maximum. Actual streamflow can be expected to fall between the lower and upper forecast values eight out of ten years.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation, temperature, and other parameters are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE	ADDRESS
Alaska	201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687
Arizona	201 East Indianola, Suite 200, Phoenix, AZ 85012
Colorado	2490 West 26th Ave., Denver, CO 80211
New Mexico	517 Gold Ave. S.W., Room 3301, Albuquerque, NM 87102-3157
Idaho	304 North 8th Street, Room 345, Boise, ID 83702
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715
Nevada	1201 Terminal Way, Room 219, Reno, NV 89502
Oregon	1220 Southwest 3rd Ave., Room 1640, Portland, OR 97204
Utah	4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	360 U.S. Court House, Spokane, WA 99201-1080
Wyoming	Federal Building, 100 East "B" Street, Casper, WY 82601

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 248, Portland, OR 97209.

Published by other agencies:

Water Supply Outlook Reports prepared by other agencies include: California — Snow Survey Branch, California Department of Water Resouces, P.O. Box 388, Sacramento, CA 95802; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A 3V1; Alberta, Environment Technical Services Division, 9820 106th St., Edmonton, Alberta T5K 2J6.

Utah
Water Supply Outlook

and

Federal – State – Private Cooperative Snow Surveys

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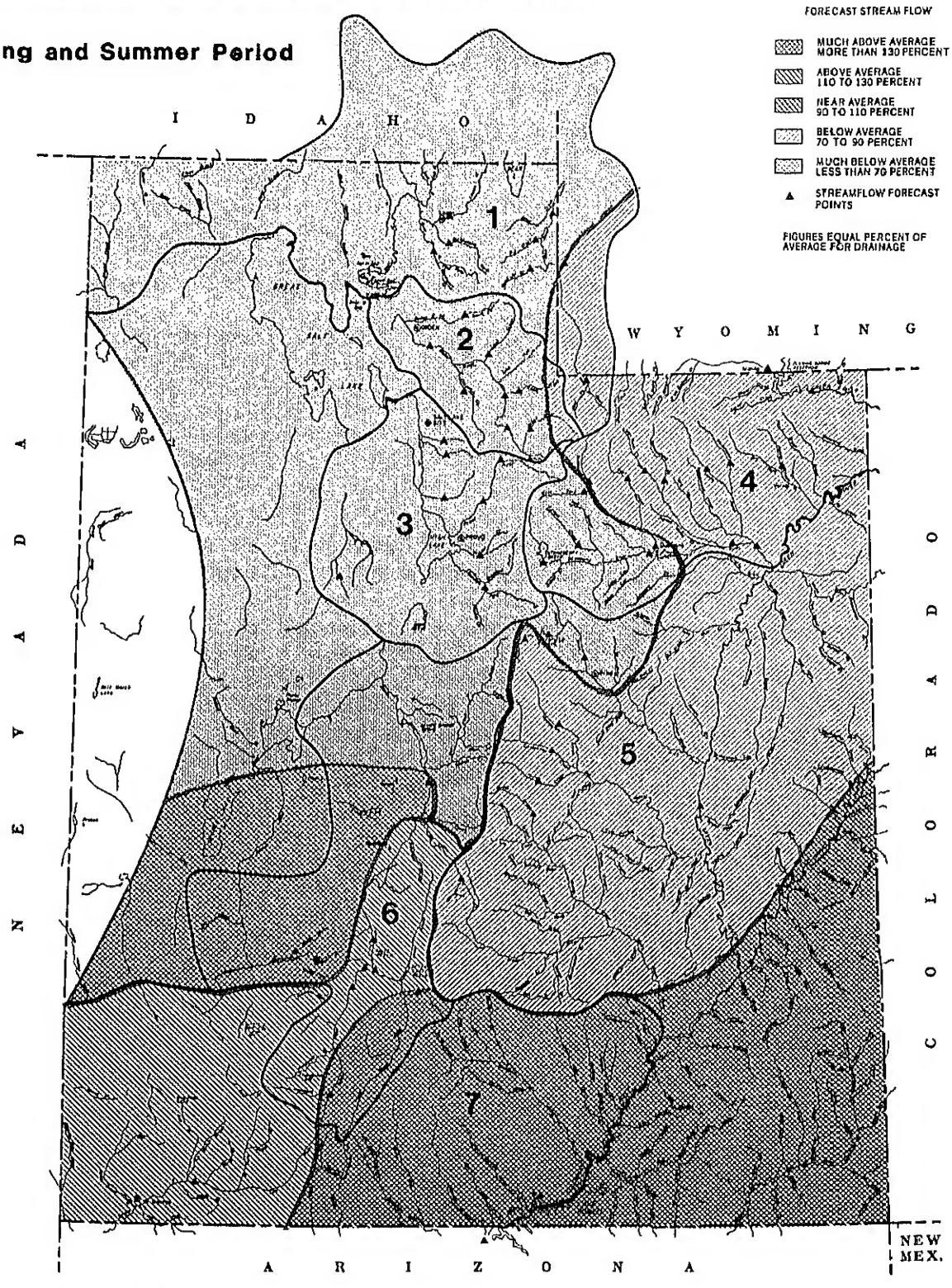


1 BEAR RIVER BASIN
2 WEBER & OGDEN WATERSHEDS IN UTAH
3 UTAH LAKE, JORDAN RIVER & TOOELE VALLEY
4 UINTAH BASIN & DAGGET SCD'S
5 CARBON, EMERY, WAYNE, GRAND & SAN JUAN CO.
6 SEVIER & BEAVER RIVER BASINS
7 E. GARFIELD, KANE, WASHINGTON & IRON CO.

GENERAL OUTLOOK

SUMMARY

Snowpack on the Bear River watershed improved slightly during February while all other areas of the State worsened. Watersheds in central and eastern Utah now have even less water stored in the snowpack this year than last year at this time. Forecasts for spring and summer streamflow have generally dropped from levels forecast a month ago. Reservoir storage is above average in most areas, however, a factor which will help to alleviate some potential shortages next summer.

SNOWPACK

Below average precipitation and above average temperatures during February have tended to balance out the snowpack across the state. Northern Utah drainages received one-half to three-fourths normal snowpack accumulation while the South received either minimal increase or, as was the case in southwestern Utah, a slight decrease from February 1. March 1 water content across the State ranges from 62% of average on the Weber to 83% of average in southwestern Utah. One month ago, the range was much wider from north to south (68-111%). Two to three times normal snowpack accumulation in March would be required just to reach average water content by April. With normal additional snow water accumulation in March, the snowpack will peak at 70 to 90% of average.

PRECIPITATION

Precipitation at mountain stations during February was much below normal across the state with the northern mountains faring slightly better than the southern mountains in contrast to previous months. Valley precipitation was much below average over the entire State last month too. Record low precipitation for February was recorded at several stations. February is the first month this water year that southern Utah did not receive substantially more precipitation than the northern portion of the State. Total precipitation accumulation for the water year is near 70% of normal in northern Utah while southern Utah remains generally above average.

RESERVOIRS

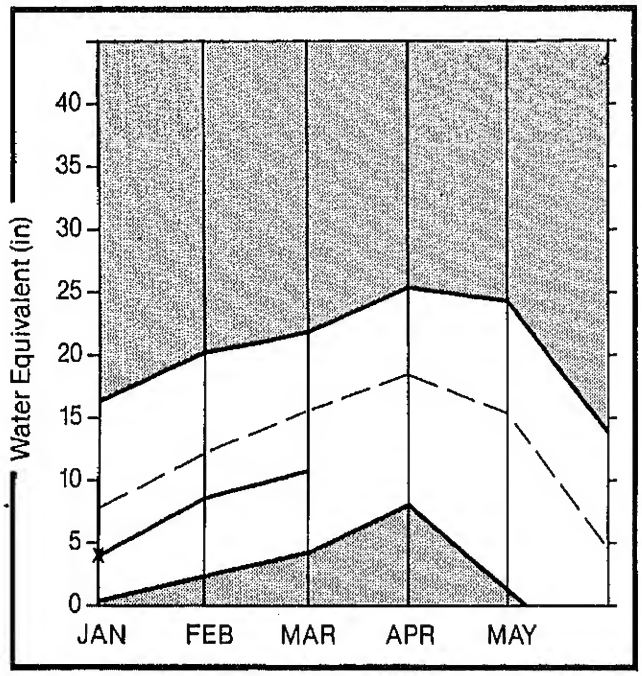
End of February reservoir storage remains above average across the State. The twenty-six key irrigation reservoirs in our sample are storing 79% of their cumulative capacity which is 115% of average for this time of year. Normally these reservoirs are storing only 68% of capacity by the end of February. Most reservoirs in northern Utah are expected to fill this spring, even though the forecasts are low, because of the carry-over from last year. Possible exceptions are East Canyon and Pineview. The Enterprise Reservoirs are currently holding only about 10% of their cumulative capacity. With a loss of a good deal of low elevation snowpack and very little resultant streamflow during February, their filling is becoming more and more doubtful.

STREAMFLOW

Forecasts of spring and summer streamflow have dropped by as much as 40% from the levels forecast last month as a result of meager additional snowpack accumulation during February. The smallest reductions occurred on the Uinta Mountains while the largest percentage reductions took place on the Sevier River and tributaries to the Sevier. Forecasts now range from 50% of average on the Bear near Harer, ID to 121 percent of average for the East Fork of the Sevier near Kingston. All forecasts assume average precipitation, snow accumulation and melt through the remainder of the forecast period. If below average precipitation and above average temperature persists, it is likely forecasts will be reduced further.

Bear River Basin

Mountain snowpack* (inches)



*Based on selected stations

Maximum

Minimum

Average

Current

WATER SUPPLY OUTLOOK:

The Bear River watershed experienced only about two-thirds normal snow accumulation during February. March 1 snowpack is 70% of average on the upper Bear, lower Bear and Logan River. The Raft River Mountains have 65% of normal snow water content. Streamflow forecasts are less than last month. Forecasts now range from 50% of average for April through September flow on the Bear near Harer, ID to 82% of the April-July average for the Bear near the UT-WY stateline. Reservoir storage is 105% of average.

For more information contact your local Soil Conservation Service Office:
Tremonton Field Office 801-257-5403
Logan Field Office 801-753-5616

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
BEAR RIVER near UT-WY Stateline	APR-JUL	116.0	95.0	82	125.0	108	65.0	56
BEAR near Woodruff	APR-JUL	150.0	105.0	70	185.0	123	25.0	17
WOODRUFF CREEK near Woodruff	APR-JUL	17.3	11.4	66	15.0	87	7.0	40
BIG CREEK near Randolph	APR-JUL	5.3	3.3	62	6.0	113	1.0	19
BEAR near Randolph	APR-JUL	126.0	65.0	52	135.0	107	25.0	20
SMITHS FORK near Border	APR-SEP	123.0	75.0	61	105.0	85	45.0	37
THOMAS FORK near Stateline	APR-SEP	37.0	20.0	54	30.0	81	10.0	27
BEAR RIVER near Harer	APR-SEP	310.0	155.0	50	295.0	95	60.0	19
CUB RIVER near Preston	APR-JUL	46.8	30.0	64	45.0	96	15.0	32
LITTLE BEAR RIVER near Paradise	APR-JUN	42.0	28.0	67	45.0	107	15.0	36
LOGAN RIVER near Logan	APR-JUL	122.0	75.0	61	110.0	90	40.0	33
BLACKSMITH FORK near Hyrum	APR-JUL	51.0	34.0	67	55.0	108	15.0	29

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
BEAR LAKE	1421.0	1036.2	1051.5	992.5
HYRUM	15.3	12.0	10.0	10.8
PORCUPINE	11.3	5.5	10.8	3.7
WOODRUFF NARROWS	55.8	30.9	50.0	---
WOODRUFF CREEK		NO REPORT		

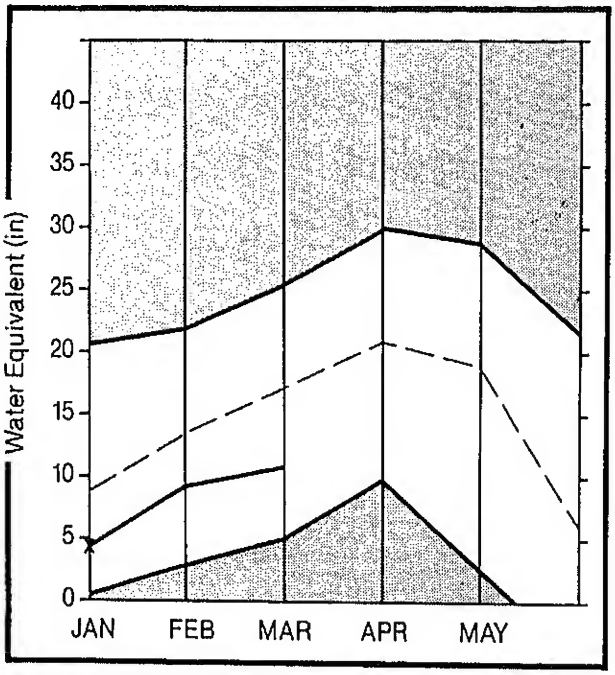
WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	AVERAGE
BEAR RIVER, UPPER IN UTAH	6	103	70
BEAR RIVER, LOWER IN UTAH	10	133	71
BEAR R. DRAINAGE IN UTAH	15	124	70
BEAR RIVER, UPPER	12	108	70
BEAR RIVER, LOWER	19	133	70
BEAR RIVER DRAINAGE	29	124	69
LOGAN RIVER	5	146	70
RAFT RIVER	4	101	65
BEAR RIVER BASIN	35	120	69

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
2 - Corrected for upstream diversions or changes in reservoir storage.
The average is computed for the 1961-85 base period.

Weber & Ogden Watersheds

Mountain snowpack* (inches)



*Based on selected stations

Maximum ▒▒▒▒ Average - - - -

Minimum ▒▒▒▒ Current ————

WATER SUPPLY OUTLOOK:

Snowpack on the Weber River watershed is only 62% of average. This is even less water content than was in the snowpack at the same time last year. During February, the snowpack increased less than half as much as usual. Forecasts of April through June streamflow are lower than the levels predicted last month. Most probable forecasts now range from 53% for Pineview Reservoir Inflow to 76% for the Weber near Oakley. End of February reservoir storage was 64% of capacity (78% as much as last year). This is 105% of average.

For more information contact your local Soil Conservation Service Office:
Layton Sub Office 801-544-9144

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
SMITH AND MOOREHOUSE CREEK near Oakl	APR-JUN	30.1	23.0	76	30.0	100	15.0	50
WEBER RIVER near Oakley	APR-JUN	107.0	70.0	65	100.0	93	45.0	42
ROCKPORT RESERVOIR inflow	APR-JUN	120.0	77.0	64	120.0	100	40.0	33
CHALK CREEK near Coalville	APR-JUN	41.0	22.0	54	35.0	85	10.0	24
WEBER RIVER near Coalville	APR-JUN	127.0	72.0	57	110.0	87	35.0	28
ECHO RESERVOIR inflow	APR-JUN	163.0	103.0	63	150.0	92	60.0	37
LOST CREEK near Croyden	APR-JUN	15.6	10.0	64	17.0	109	4.0	26
EAST CANYON CREEK near Morgan	APR-JUN	29.0	18.0	62	28.0	97	10.0	34
HARDSCRABBLE CREEK near Porterville	APR-JUN	18.4	12.0	65	21.0	114	4.0	22
WEBER RIVER at Gateway	APR-JUN	328.0	180.0	55	255.0	78	105.0	32
SOUTH FORK OGDEN RIVER near Huntsvil	APR-JUN	58.0	32.0	55	50.0	86	15.0	26
PINEVIEW RESERVOIR inflow	APR-JUN	122.0	65.0	53	90.0	74	35.0	29
WHEELER CREEK near Huntsville	APR-JUN	6.3	3.7	59	5.0	79	2.0	32
FARMINGTON CREEK near Farmington	APR-JUL	8.2	4.5	55	9.0	110	2.0	24

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
CAUSEY	7.1	3.9	4.4	2.3
EAST CANYON	48.1	33.0	43.6	35.6
ECHO	73.9	56.1	63.4	49.5
LOST CREEK	20.0	17.2	17.6	13.4
PINEVIEW	110.1	41.2	63.8	48.7
ROCKPORT	60.9	25.4	42.0	30.2
WILLARD BAY	165.5	133.7	164.8	116.4

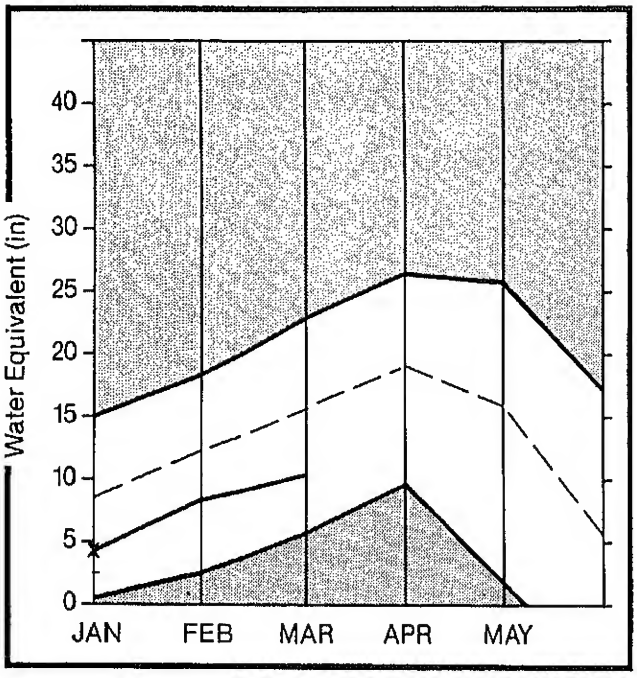
WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	AVERAGE
OGDEN RIVER	4	109	61
WEBER RIVER	16	95	63
WEBER & OGDEN WATERSHEDS	20	98	62

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
2 - Corrected for upstream diversions or changes in reservoir storage.
The average is computed for the 1961-85 base period.

Utah Lake, Jordan River & Tooele Valley

Mountain snowpack* (inches)



*Based on selected stations

Maximum

Minimum

Average

Current

WATER SUPPLY OUTLOOK:

Snow water equivalent on the watersheds that drain into the Great Salt Lake through Salt Lake and Tooele County is only 93% of last year which is 65% of the March 1 average. Average additional accumulation during March will produce peak snowpack of only 72% of average on April 1. Forecasts of spring and summer streamflow now range from 50 to 80% of average. Dear Creek Reservoir has 20% more water in storage than usual for the end of February. Other area reservoirs range from 100 to 180% of average.

For more information contact your local Soil Conservation Service Office:

Midvale Field Offcie 801-524-4373

Provo Field Office 801-377-5580

UTAH LAKE, JORDAN RIVER & TOOELE VALLEY

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
SALT CREEK near Nephi	APR-JUL	13.5	9.0	67	20.0	148	3.0	22
PAYSON CREEK near Payson	APR-JUL	7.3	4.5	62				
HOBBLE CREEK near Springville	APR-JUL	23.3	13.0	56				
PROVO near Hailstone	APR-JUL	113.0	70.0	62	105.0	93	40.0	35
PROVO below Deer Creek Dam	APR-JUL	133.0	75.0	56	110.0	83	35.0	26
AMERICAN FORK near American Fk.	APR-JUL	34.0	17.0	50	25.0	74	10.0	29
UTAH LAKE inflow	APR-JUL	285.0	200.0	68	285.0	97	120.0	41
LITTLE COTTONWOOD CRK near SLC	APR-JUL	41.0	25.0	61	30.0	73	20.0	49
BIG COTTONWOOD CRK near SLC	APR-JUL	39.0	26.0	67	30.0	77	20.0	51
PARLEY'S CEEK near SLC	APR-JUL	17.0	9.0	53	15.0	88	5.0	29
MILL CREEK near SLC	APR-JUL	6.8	4.5	65	7.0	101	3.0	43
EMIGRATION CREEK near SLC	APR-JUL	4.6	2.5	54				
CITY CREEK near SLC	APR-JUL	9.0	5.0	56	7.0	78	3.0	33
VERNON CREEK near Vernon	APR-JUN	1.2	1.0	80	1.6	137	0.3	23
SETTLEMENT CREEK near Tooele	APR-JUL	2.3	1.7	74	3.0	130	1.0	43
SOUTH WILLOW CREEK near Grantsville	APR-JUL	3.0	2.0	67	4.0	133	1.0	33

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
DEER CREEK	149.6	114.6	130.1	95.5
GRANTSVILLE	3.3	2.0	3.2	---
SETTLEMENT CREEK	1.0	0.9	0.9	0.5
STRAWBERRY-ENLARGED	951.4	478.5	689.3	---
UTAH LAKE	855.5	795.0	893.0	689.4
VERNON CREEK	0.6	0.5	0.6	0.5

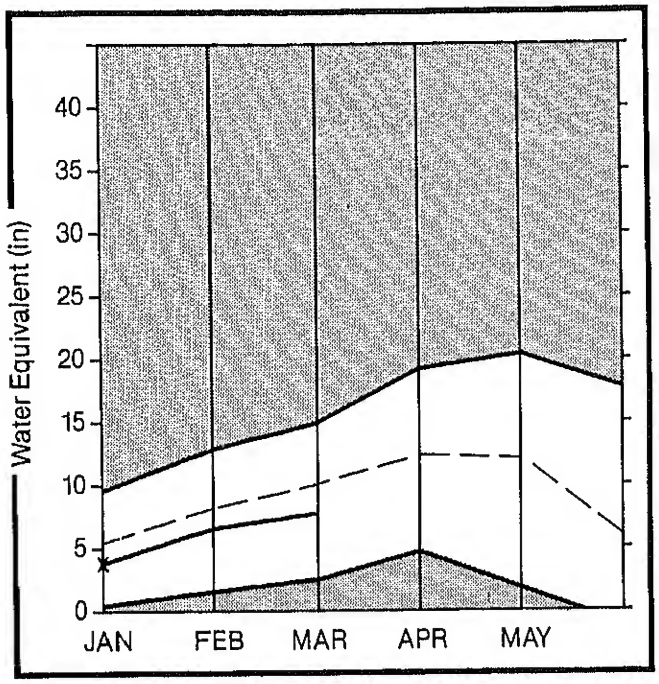
WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	AVERAGE
PROVO RIVER & UTAH LAKE	10	120	67
PROVO RIVER	5	103	60
JORDAN RIVER & GREAT SALT	13		
TOOELE & VERNON W.S.'S	4		
UTAH L.-JORDAN R.-TOOELE	27		

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
2 - Corrected for upstream diversions or changes in reservoir storage.
The average is computed for the 1961-85 base period.

Uintah Basin & Dagget SCD's

Mountain snowpack* (inches)



*Based on selected stations

Maximum Average

Minimum Current

WATER SUPPLY OUTLOOK:

Snow accumulation on the Uintas was better than other areas of the State but still only 76% of normal during February. March 1 surveys indicate above average snowpack on the north slope drainages east of the Bear and much below average snow water on south slope drainages. Streamflow forecasts now range from 65% of average on the Strawberry River to 92% on Henry's Fork. Reservoir storage ranges from 62% of capacity (132% of average) in Moon Lake to 97% of capacity (143% of average) in Starvation.

For more information contact your local Soil Conservation Service Office:
Roosevelt Field Office 801-722-4621

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
BLACK'S FORK near Millburne	APR-JUL	90.0	76.0	84	110.0	122	45.0	50
HENRY'S FORK near Manila	APR-SEP	51.0	47.0	92	70.0	137	30.0	59
FLAMING GORGE RESERVOIR inflow	APR-SEP	1441.0	1025.0	71	1400.0	97	695.0	48
ASHLEY CREEK near Vernal	APR-JUL	52.0	42.0	81	55.0	106	30.0	58
WEST FORK DUCHESNE RIVER near Hanna	APR-JUL	28.0	18.5	66	25.0	89	10.0	36
DUCHESNE RIVER near Tabiona	APR-JUL	105.0	73.0	70	90.0	86	50.0	48
ROCK CREEK near Mountain Home	APR-JUL	95.0	78.0	82	100.0	105	60.0	63
DUCHESNE RIVER near Duchesne	APR-JUL	189.0	135.0	71	173.0	92	175.0	93
CURRANT CREEK near Fruitland	APR-JUL	20.0	13.5	68	18.0	90	9.0	45
STRAWBERRY RESERVOIR inflow	APR-JUL	60.0	39.0	65	55.0	92	25.0	42
STRAWBERRY RIVER at Duchesne	APR-JUL	69.0	45.0	65	60.0	87	30.0	43
LAKEFORK RIVER near Mountain Home	APR-JUL	70.0	58.0	83	80.0	114	40.0	57
YELLOWSTONE RIVER near Altonah	APR-JUL	66.0	52.0	79	80.0	121	25.0	38
DUCHESNE near Myton	APR-JUL	223.0	150.0	67	220.0	99	60.0	27
UINTAH RIVER near Neola	APR-JUL	86.0	69.0	80	105.0	122	30.0	35
WHITE ROCKS RIVER near Whiterocks	APR-JUL	60.0	48.0	80	75.0	125	20.0	33
DUCHESNE near Randlett	APR-JUL	257.0	180.0	70	365.0	142	55.0	21

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
FLAMING GORGE	3749.0	3016.4	2969.3	---
MOON LAKE	35.8	22.1	27.9	16.8
RED FLEET	26.0	20.4	17.5	---
STEINAKER	33.3	28.0	32.2	21.1
STARVATION	165.3	160.1	160.3	112.1
STRAWBERRY-ENLARGED	951.4	478.5	689.3	---

WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	AVERAGE
UPPER GREEN RIVER in UTAH	13	88	84
ASHLEY CREEK	2	68	58
BLACK'S FORK RIVER	3	104	100
SHEEP CREEK	2	85	100
DUCHESNE RIVER	16	93	68
LAKE FORK-YELLOWSTONE CK.	3	84	68
STRAWBERRY RIVER	4	151	71
UINTAH-WHITEROCKS RIVERS	4	79	65
UINTAH BASIN & DAGGET SCD	29	91	73

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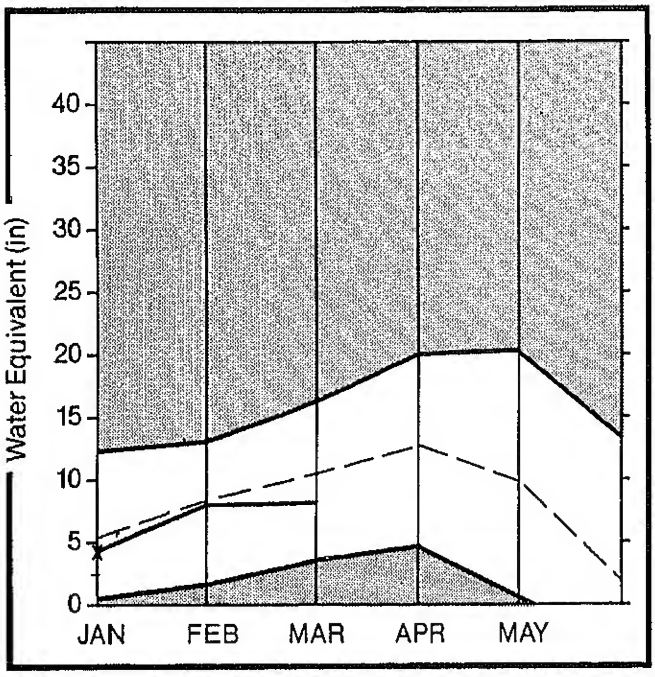
2 - Corrected for upstream diversions or changes in reservoir storage.
The average is computed for the 1961-85 base period.

Carbon, Emery, Wayne, Grand, and San Juan Co.

Mountain snowpack* (inches)



*Based on selected stations

Maximum ▒▒▒ Average ----

Minimum ▒▒▒ Current ———

WATER SUPPLY OUTLOOK:

Minimal increases to the snowpack were received during February. The only area still above average is the Lasal Mountains with 102% of average March 1 snow water content. Snowpack elsewhere in southeastern Utah ranges from 58% of average on Muddy Creek to 88% on the Abajo Mountains. April through July streamflow forecasts are generally reduced from last month ranging from 62% of average on Muddy Creek near Emery to 102% of average on Mill Creek near Moab. Reservoir storage is 114% of average.

For more information contact your local Soil Conservation Service Office:
Price Field Office 801-637-0041

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
COLORADO near Cisco, UT	APR-JUL	3457.0	3300.0	95	4685.0	136	2230.0	65
MILL CREEK near Moab	APR-JUL	5.5	5.6	102	8.0	145	4.0	73
GREEN near Green Rv., UT	APR-JUL	3182.0	2550.0	80	3410.0	107	1690.0	53
GOOSEBERRY CREEK near Scofield	APR-JUL	12.0	9.0	75	13.0	108	5.0	42
SCOFIELD RESERVOIR inflow	APR-JUL	46.0	31.0	67	43.0	93	21.0	46
PRICE near Heiner	APR-JUL	78.0	52.0	67				
ELECTRIC LAKE Inflow	APR-JUL	15.1	11.0	73	15.0	99	8.0	53
HUNTINGTON CREEK near Huntington	APR-JUL	55.0	38.0	69	53.0	96	28.0	51
COTTONWOOD CREEK near Orangeville	APR-JUL	47.0	35.0	74	50.0	106	15.0	32
FERRON CREEK near Ferron	APR-JUL	41.0	29.0	71	45.0	110	10.0	24
SEVEN MILE CREEK near Fish Lake	APR-JUL	6.5	5.6	86	8.0	123	3.0	46
MUDDY CREEK near Emery	APR-JUL	21.0	13.0	62	25.0	119	5.0	24
NAVAJO RESERVOIR inflow	APR-JUL	764.0	750.0	98	1065.0	139	480.0	63
SAN JUAN near Bluff, UT	APR-JUL	1091.0	1050.0	96	1565.0	143	625.0	57

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
HUNTINGTON NORTH	3.9	3.6	4.0	3.0
JOE'S VALLEY	61.6	42.9	45.8	44.6
KEN'S LAKE	2.3	0.9	0.9	---
MILL SITE	16.7	8.8	12.0	4.0
SCOFIELD	65.8	40.5	52.7	32.2

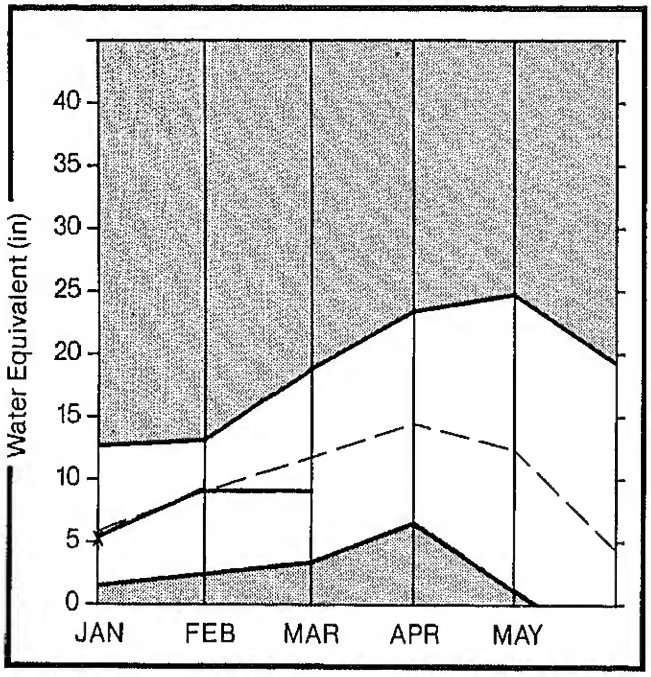
WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	AVERAGE
PRICE RIVER	3	159	82
SAN RAFAEL RIVER	7	113	71
MUDDY RIVER	2	103	58
FREMONT RIVER	4	77	71
LASAL MOUNTAINS	2	77	102
BLUE MOUNTAINS	2	84	88
WILLOW CREEK - WHITE RIVE	3	132	76
SOUTHEASTERN UTAH	22	100	77

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
2 - Corrected for upstream diversions or changes in reservoir storage.
The average is computed for the 1961-85 base period.

Sevier & Beaver River Basins

Mountain snowpack* (inches)



*Based on selected stations

Maximum Average

Minimum Current

WATER SUPPLY OUTLOOK:

Snow water content on the Sevier River watershed normally increases by three inches during February. Last month, however, the snowpack increased by only one-tenth of an inch--one of the smallest increases on record. The poor showing in February resulted in March 1 readings generally in the 70 to 80% range. Streamflow forecasts have dropped 9 to 40% since last month and now range from 60 to 121% of average. Reservoirs on the Sevier and Beaver are now holding 87% of their useable capacity (161% of average).

For more information contact your local Soil Conservation Service Office:
Richfield Field Office 801-896-6261
Fillmore Field Office 801-743-6655

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
SEVIER at Hatch	APR-JUL	52.0	55.0	106	75.0	144	40.0	77
SEVIER near Circleville	APR-JUL	44.0	50.0	114				
SEVIER near Kingston	APR-JUL	34.0	38.0	112	65.0	191	20.0	59
ANTIMONY CREEK near Antimony	APR-JUL	8.9	9.0	101				
E F SEVIER near Kingston	APR-JUL	24.0	29.0	121	45.0	188	20.0	83
SEVIER blw Piute Dam	APR-JUL	56.0	65.0	116	100.0	179	35.0	63
CLEAR CREEK near Sevier	APR-JUL	22.0	23.0	105				
SIGURD to GUNNISON	APR-JUL	44.0	50.0	114	90.0	205	15.0	34
KINGSTON to VERMILLION DAM	APR-JUN	40.0	40.0	100				
VERMILLION DAM to GUNNISON	MAR-JUN	53.6	60.0	112				
SALINA CREEK at Salina	APR-JUN	18.2	12.0	66				
PLEASANT CREEK near Pleasant	APR-JUL	11.5	7.0	61				
EPHRAIM CREEK near Ephraim	APR-JUL	25.0	15.0	60				
SEVIER nr Gunnison	APR-JUL	99.0	105.0	106				
CHICKEN CREEK near Levan	APR-JUL	3.5	2.1	60	3.0	86	1.0	29
OAK CREEK near Oak City	APR-JUL	1.8	1.1	69	2.0	125	1.0	62
CHALK CREEK near Fillmore	APR-JUL	16.4	13.0	79	19.0	116	7.0	43
BEAVER RIVER near Beaver	APR-JUL	27.0	25.0	93	39.0	144	13.0	48
NORTH CREEK near Beaver (combined)	APR-JUL	14.6	14.0	96	26.0	178	4.0	27
MINERSVILLE RESERVOIR inflow	APR-JUN	8.9	9.8	110	14.0	157	5.0	56

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
GUNNISON	20.3	14.8	20.3	14.0
MINERSVILLE (RkyFd)	26.0	18.8	21.0	12.9
OTTER CREEK	52.7	52.4	52.6	31.2
PIUTE	71.8	67.8	63.6	41.6
SEVIER BRIDGE	236.0	198.5	227.8	119.6
PANQUITCH LAKE	22.3	18.7	17.5	---

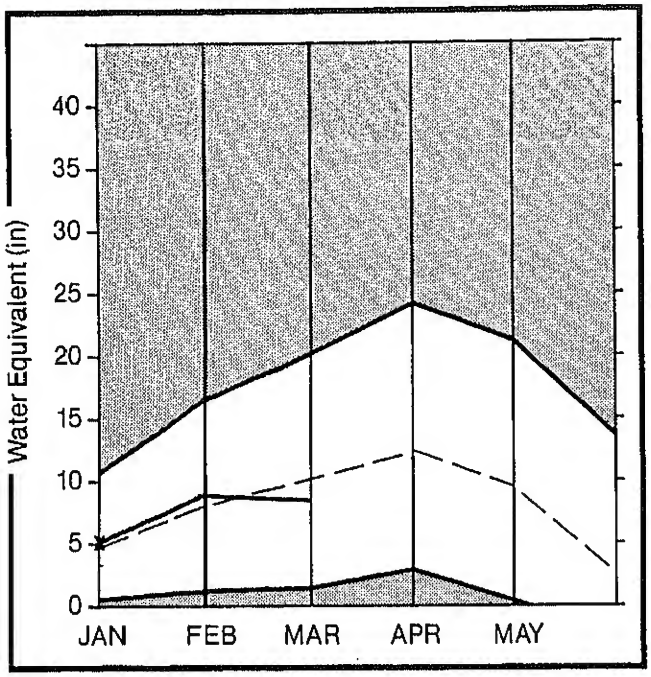
WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	AVERAGE
U SEVIER (s of Richfield)	11	88	74
EAST FORK SEVIER RIVER	4	87	78
SOUTH FORK SEVIER RIVER	7	89	72
LOWER SEVIER RIVER	12	113	76
BEAVER RIVER	3	124	95
SEVIER & BEAVER R. BASINS	26	105	78

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
2 - Corrected for upstream diversions or changes in reservoir storage.
The average is computed for the 1961-85 base period.

E. Garfield, Kane, Washington, & Iron Co.

Mountain snowpack* (inches)



*Based on selected stations

Maximum Average

Minimum Current

WATER SUPPLY OUTLOOK:

Water equivalent in southwestern Utah watersheds decreased slightly during February rather than the normal 2.3 inch increase. March 1 snowpack ranges from seventy-five percent of average on the Virgin River watershed to 106% on Parowan Creek. Streamflow forecasts are still for above average flow on the Virgin and Santa Clara Rivers and Coal Creek. Inflow to Lake Powell is now forecast 89% of average. Gunlock and Quail Creek reservoirs have 79 and 95% of capacity in storage respectively. Enterprise Reservoirs have only 10%

For more information contact your local Soil Conservation Service Office:
Cedar City Field Office 801-586-2429

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
LAKE POWELL inflow	APR-JUL	8046.0	7200.0	89	10100.0	126	4700.0	58
VIRGIN near Hurricane	APR-JUN	68.0	80.0	118	105.0	154	50.0	74
SANTA CLARA near Pine Valley	APR-JUN	5.0	6.0	120				
COAL CREEK near Cedar City	APR-JUL	20.0	22.0	110	30.0	150	15.0	75

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
GUNLOCK	10.4	8.2	6.4	---
LAKE POWELL	25002.0	0.0	21570.0	---
QUAIL CREEK	40.0	38.0	24.0	---
UPPER ENTERPRISE	10.0	0.8	---	---
LOWER ENTERPRISE	2.6	0.5	---	---

WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	AVERAGE
VIRGIN RIVER	5	125	75
PAROWAN	4	111	106
ENTERPRISE TO NEW HARMONY	2	183	99
COAL CREEK	3	139	91
ESCALANTE RIVER	2	57	91
SOUTHWESTERN UTAH	12	125	91

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
2 - Corrected for upstream diversions or changes in reservoir storage.
The average is computed for the 1961-85 base period.

SNOW MEASUREMENT DATA

SNOW COURSE	ELEV.	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
ALTA CENTRAL	8800	2/29	54	19.7	20.8	30.3
ASHLEY TWIN LAKES	10500	2/24	27	6.2	10.1	13.6
ATWOOD LAKE	10500	2/24	22	4.4	8.6	9.7
BEAVER CREEK DIVIDE	8280	2/25	26	6.8	7.1	10.8
BEAVER DAMS	8000	2/23	28	8.3	7.0	10.5
BEN LOMOND PEAK	8000	2/27	52	16.9	20.8	31.2
BEN LOMOND TRAIL	6000	2/27	34	10.6	10.2	16.7
BEVAN'S CABIN	6450	2/29	24	7.1	11.1	8.8
BIG FLAT	10290	2/22	47	14.8	13.5	14.5
BIRCH CROSSING	8100	2/23	23	8.3	5.0	6.4
BLACK'S FLAT-U.M. CK	9400	2/23	28	7.0	7.0	9.4
BLACK'S FORK	9200	2/23	-	7.0E	6.8	11.5
BLACK'S FORK GS-EF	9340	2/25	32	8.1	6.5	7.6
BLACK'S FORK JUNCTN	8930	2/25	31	7.7	6.6	7.6
BOX CREEK	9300	2/23	34	9.3	7.5	11.4
BRIAN HEAD	10000	2/22	55	17.3	17.1	16.5
BRIGHTON	8750	2/29	40	12.8	17.6	29.3
BRIGHTON CABIN	8700	2/29	41	12.9	15.0	23.2
BROWN DUCK RIDGE	10600	2/24	48	12.5	13.8	16.9
BRYCE CANYON	8000	2/22	13	1.4	3.7	4.6
BUCK FLAT	9800	2/23	35	10.4	9.0	14.8
BUCK PASTURE	9700	2/24	45	10.8	10.8	13.5
BUCKBOARD FLAT	9000	2/29	30	9.4	13.0	10.8
BUG LAKE	7950	2/26	40	12.0	8.9	15.5
BURT'S-MILLER RANCH	7900	2/25	18	3.8	3.8	4.6
CAMP JACKSON	8600	2/29	30	10.2	10.4	11.5
CASTLE VALLEY	9580	2/22	36	10.0	10.3	11.4
CHALK CREEK #1	9100	2/24	44	13.2	15.3	18.7
CHALK CREEK #2	8200	2/25	36	9.2	10.2	12.2
CHALK CREEK #3	7500	2/25	24	5.1	5.4	6.7
CHEPETA	10300	2/25	31	7.1	9.2	10.6
CHEPETA-WHITERKS. LK	10350	2/24	35	8.0	9.9	12.6
CITY CREEK	7500	3/01	41	13.0	14.4	22.7
CLEAR CREEK MEADOWS	9420	2/23	48	13.6	13.8	19.3
CLEAR CREEK RIDGE #1	9200	2/24	38	12.5	8.6	16.2
CLEAR CREEK RIDGE #2	8000	2/24	37	9.7	7.3	12.3
CLEAR CREEK RIDGE #3	6600	2/24	25	6.1	3.1	7.5
CURRANT CREEK	8000	2/24	24	6.3	3.4	8.9
DANIELS-STRAWBERRY	8000	2/24	32	9.3	5.3	12.9
DESERET PEAK	9250	2/29	25	7.3	-	22.2
DILL'S CAMP	9200	2/23	21	5.8	5.6	10.6
DONKEY RESERVOIR	9800	2/23	22	4.5	12.1	6.7
DRY BREAD POND	8350	2/26	33	10.2	5.6	16.0
DUCK CREEK R.S.	8700	2/25	-	7.6E	9.8	11.8
EAST SHINGLE LAKE	9800	2/24	51	14.8	14.3	22.8
EAST WILLOW CREEK	8250	2/26	29	7.5	6.0	9.9
FARMINGTON CANYON	8000	2/27	43	13.4	16.4	26.1
FARMINGTON CANYON L.	6950	2/27	37	10.8	13.4	20.0
FARNSWORTH LAKE	9600	2/23	43	11.6	15.7	15.5

SNOW MEASUREMENT DATA (cont.)

SNOW COURSE	ELEV.	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
FISH LAKE	8700	2/23	20	5.2	5.0	7.4
FIVE POINT LAKE	11000	2/24	40	8.4	12.4	13.1
FRANCES FLATS	6700	3/01	28	9.2	11.3	18.1
G.B.R.C. HEADQUARTER	8700	2/23	34	11.0	10.1	14.2
G.B.R.C. MEADOWS	10000	2/23	44	13.5	13.3	20.0
GARDEN CITY SUMMIT	7600	2/26	31	8.7	5.6	15.4
GEORGE CREEK	8840	2/23	42	12.2	12.4	18.1
GOOSEBERRY R.S.	8000	2/23	30	8.5	8.6	10.1
HARDSCRABBLE	6700	2/27	34	10.3	9.6	17.0
HARRIS FLAT	7700	2/22	16	4.2	6.1	7.9
HAYDEN FORK	9400	2/25	35	9.0	9.3	12.9
HENRY'S FORK	10000	2/24	37	10.0	10.8	11.3
HEWINTA G.S.	9500	2/25	33	8.9	7.7	7.5
HIDDEN SPRINGS	5500	3/02	7	2.5	3.6	6.0
HOLE-IN-THE-ROCK	9150	2/25	22	4.9	5.2	4.5
HOLE-IN-THE-ROCK GS	8300				-	2.3
HICKERSON PARK	9100	2/25	32	9.3	6.7	5.5
HOBBLE CREEK SUMMIT	7420	2/24	33	9.7	5.6	12.9
HORSE RIDGE	8260	2/27	40	12.6	10.4	18.9
HUNTINGTON-HORSESHOE	9800	2/24	43	14.8	13.0	21.3
INDIAN CANYON	9100	2/24	33	8.0	7.3	10.8
JOHNSON VALLEY	8850	2/23	18	4.4	3.2	6.4
KILFOIL CREEK	7300	2/27	32	8.0	8.0	12.5
KILLYON CANYON	6300	3/02	18	6.1	7.5	6.9
KIMBERLY MINE(UPPER)	9300	2/22	41	12.0	11.7	13.1
KING'S CABIN (UPPER)	8730	2/25	20	3.9	6.7	8.5
KLONDIKE NARROWS	7400	2/26	39	12.7	9.1	17.4
KOLOB-CRYSTAL	9250	2/22	52	15.9	9.2	17.4
LAKEFORK BASIN	11100	2/24	45	10.8	10.9	17.7
LAKEFORK MOUNTAIN #1	10200	2/24	28	6.4	8.9	9.4
LAKEFORK MOUNTAIN #3	8400	2/24	17	3.0	3.4	5.7
LAMBS CANYON	7400	2/25	37	11.0	11.3	14.2
LASAL MOUNTAIN LOWER	8800	3/02	25	7.2	8.9	7.8
LASAL MOUNTAIN (UPP)	9850	3/02	45	13.6	18.1	12.6
LIGHTNING LAKE	10500	2/24	54	13.5	15.2	19.8
LILY LAKE	9050	2/25	33	8.9	10.1	11.9
LITTLE BEAR (LOWER)	6000	2/26	26	6.9	6.7	9.5
LITTLE BEAR (UPPER)	6550	2/26	26	7.0	7.7	11.2
LITTLE GRASSY CREEK	6100	2/22	9	2.6	.0	4.0
LONG FLAT	8000	2/22	27	7.3	5.4	6.0
LONG VALLEY JCT.	7500	2/22	0	.0	1.5	4.9
LOST CREEK RESERVOIR	6130	2/27	16	4.4	3.4	5.8
MAMMOTH-COTTONWOOD	8800	2/24	42	14.0	9.3	18.4
MERCHANT VALLEY (UP)	8750	2/22	35	9.2	6.4	10.5
MIDDLE BEAVER CREEK	8650				-	3.6
MIDDLE CANYON	7000	2/29	26	8.0	13.4	11.7
MIDWAY VALLEY	9800	2/22	50	16.0	14.3	18.1
MILL CREEK	6950	2/25	40	11.4	12.9	16.3
MILL D SOUTH FORK	7400	2/26	36	10.8	12.6	17.2

SNOW MEASUREMENT DATA (cont.)

SNOW COURSE	ELEV.	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
MONTE CRISTO R.S.	8960	2/26	43	14.3	11.1	21.6
MOSBY MOUNTAIN(LOW)	9500	2/25	20	4.1	5.4	8.2
MT.BALDY R.S.	9500	2/23	51	16.2	13.3	20.2
MUD CREEK #2	8600	2/23	34	8.9	7.6	11.9
OAK CREEK	7760	2/22	31	8.0	4.8	11.4
ONE MILE SUMMIT	7330	2/23	12	3.0	3.1	6.0
OTTER LAKE	9600	2/22	37	10.9	8.2	11.6
PANQUITCH LAKE	8200	2/22	9	1.8	4.5	4.6
PARADISE PARK	10100	2/25	28	8.4	10.6	11.2
PARLEY'S CANYON SUM.	7500	2/25	40	11.8	12.2	16.0
PAYSON R.S.	8050	2/22	40	11.9	10.6	16.6
PICKLE KEG SPRING	9600	2/23	33	9.2	9.0	14.6
PINE CANYON	8000	2/27	37	11.0	9.8	17.4
PINE CREEK	8800	2/22	37	12.4	10.5	14.0
REDDEN MINE LOWER	8500	2/25	34	9.6	10.2	15.2
RED PINE RIDGE	9200	2/23	36	10.5	9.9	15.0
REES'S FLAT	7300	2/22	30	7.9	6.5	11.2
REYNOLDS PARK	10400	2/24	41	9.4	13.2	13.8
ROCK CREEK	7900	2/24	16	3.6	3.2	6.8
ROCKY BASIN-SETTLEMT	8900	2/29	39	11.7	18.4	23.4
SEELEY CREEK R.S.	10000	2/23	32	11.1	9.2	14.4
SERGEANT LAKES	8300	2/24	24	6.2	9.4	14.5
SHINGLE MILL	6200	2/29	24	7.1	5.3	7.8
SILVER LAKE(BRIGHT.)	8730	2/26	40	12.7	14.4	20.6
SMITH & MOREHOUSE	7600	2/24	29	7.5	7.8	11.4
SNOWBIRD GAD VALLEY	9700	2/23	59	19.2	27.4	28.1
SOAPSTONE R.S.	7800	2/25	-	7.7E	8.0	11.1
SPIRIT LAKE	10300	2/25	33	7.5	13.0	10.1
SQUAW SPRINGS	9300	2/23	17	4.1	3.8	6.6
STEEL CREEK PARK	10100	2/25	44	12.4	13.9	12.9
STILLWATER CAMP	8550	2/25	29	7.1	6.8	8.6
STRAWBERRY DIVIDE	8400	2/26	38	11.8	7.4	17.0
STUART R.S.	7950	2/23	21	5.2	4.2	7.4
SUSC RANCH	8200	2/23	21	9.4	5.2	7.7
TALL POLES	8800	2/23	39	11.0	9.5	12.2
THAYNES CANYON	9200	2/27	43	12.2	13.5	-
THISTLE FLAT	8500	2/23	37	11.1	-	13.8
TIMPANOGOS DIVIDE	8140	2/24	33	9.2	11.1	22.0
TONY GROVE LAKE	8400	2/26	64	23.3	14.3	30.9
TONY GROVE R.S.	6250	2/26	32	8.9	5.3	11.1
TRIAL LAKE	9960	2/25	46	13.2	13.4	20.6
TROUT CREEK	9400	2/25	25	6.0	7.8	8.5
UPPER JOES VALLEY	8900	2/23	28	6.6	6.2	9.6
VERNON CREEK	7500	2/29	27	7.1	4.9	10.1
VIPONT	7670	2/23	29	8.1	7.4	13.4
WEBSTER FLAT	9200	2/22	36	11.6	7.1	15.0
WHITE RIVER #1	8550	2/24	33	9.3	5.1	11.9
WHITE RIVER #3	7400	2/24	28	7.7	3.6	7.9
WIDTSOE-ESCALANTE #3	9500	2/23	38	10.2	13.6	9.4
WRIGLEY CREEK	9000	2/23	27	6.8	6.6	9.8
YANKEE RESERVOIR	8700	2/22	35	9.0	9.5	8.0

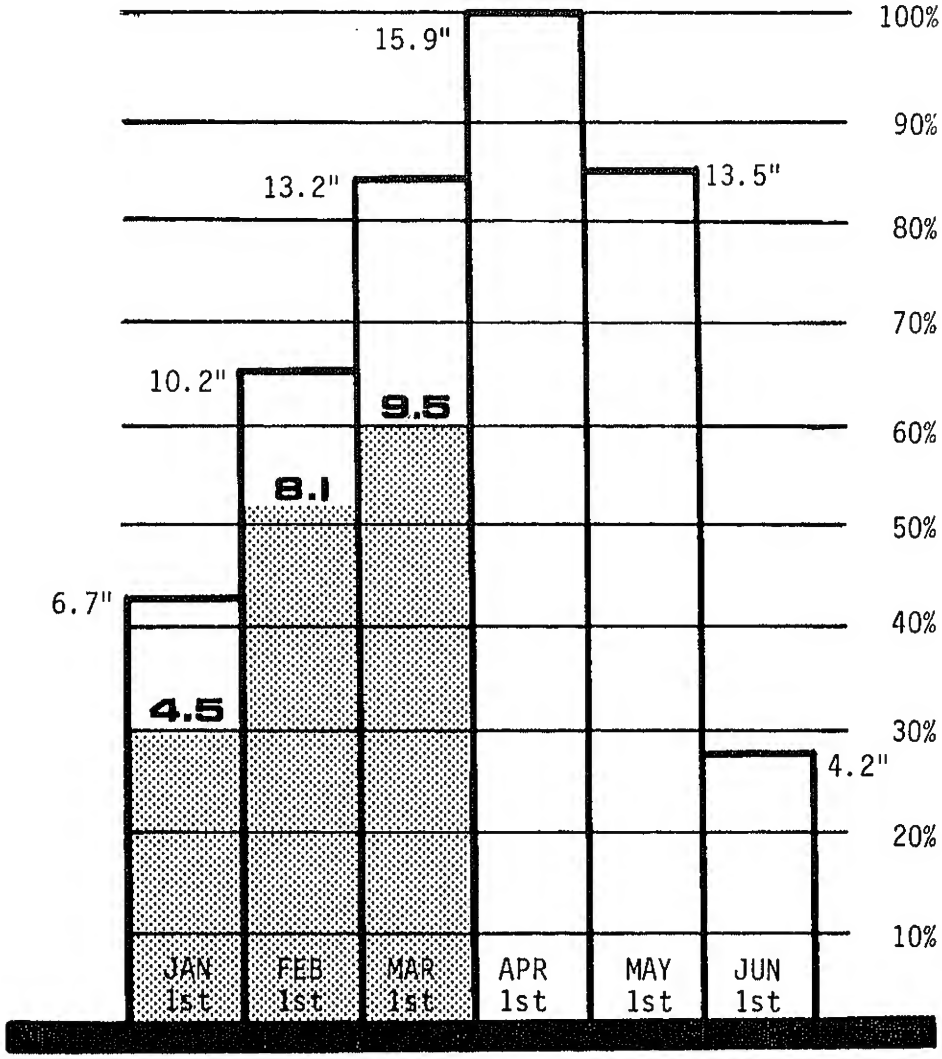
United States Department of Agriculture

Soil Conservation Service

Salt Lake City, Utah

Utah Snowpack Progress

1988



Statewide

N O T E :
Snow water equivalent in inches is compared to the highest seasonal amount (100%). Monthly averages are accumulated by basin/state.

Averages are for the period 1961-1985.

*U.S. GOVERNMENT PRINTING OFFICE: 1988-0-573-138/80002

The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

State

Utah State University
Utah State Department of Natural Resources
- Division of Wildlife Resources
- Division of Water Resources
- Division of Water Rights
- Bear River Commissioner
- Price River Commissioner
- Provo River Commissioner
- Sevier River Commissioners
- Spanish Fork River Commissioner
- Utah Lake and Jordan River Commissioner

Federal

U.S. Department of Agriculture
- Soil Conservation Service
- Forest Service

U.S. Department of Commerce
- NOAA, National Weather Service

U.S. Department of Interior
- Bureau of Reclamation
- Geological Survey
- National Park Service

Municipality

Manti
Salt Lake City

Public

Beaver River Water Users Association
Board of Canal Presidents - Jordan River
Central Utah Conservancy District
Emery Canal and Reservoir Company
Moon Lake Water Users Association
Ogden River Water Users Association
Provo River Water Users Association
Strawberry Water Users Association
Sevier River Water Users Association
Weber River Water Users Association
Weber Basin Conservancy District

Other organizations and individuals furnish information for the snow survey reports. Their cooperation is gratefully acknowledged.

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